

DEPARTMENT of ENVIRONMENTAL SERVICES  
Water Division - Watershed Management Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake: STILLWATER POND, LOWER	Lake Area (ha):	5.66
Town: MARLOW	Maximum depth (m):	6.1
County: Cheshire	Mean depth (m):	1.3
River Basin: Connecticut	Volume (m <sup>3</sup> ):	74000
Latitude: 43°05'04" N	Relative depth:	2.3
Longitude: 72°12'41" W	Shore configuration:	2.82
Elevation (ft): 1090	Areal water load (m/yr):	---
Shore length (m): 2375	Flushing rate (yr <sup>-1</sup> ):	---
Watershed area (ha): ---	P retention coeff.:	---
% watershed ponded: ---	Lake type:	natural

BIOLOGICAL:

		10 August 1998
DOM. PHYTOPLANKTON (% TOTAL)	#1	DINOBRYON 75%
	#2	ASTERIONELLA 15%
	#3	
PHYTOPLANKTON ABUNDANCE (units/mL)		
CHLOROPHYLL-A (µg/L)		18.19
DOM. ZOOPLANKTON (% TOTAL)	#1	KERATELLA 54%
	#2	NAUPLIUS LARVA 18%
	#3	POLYARTHRA 11%
ROTIFERS/LITER		155
MICROCRUSTACEA/LITER		61
ZOOPLANKTON ABUNDANCE (#/L)		224
VASCULAR PLANT ABUNDANCE		Abundant
SECCHI DISK TRANSPARENCY (m)		1.7
BOTTOM DISSOLVED OXYGEN (mg/L)		0.2
BACTERIA (E. coli, #/100 ml)	#1	5
	#2	
	#3	

SUMMER THERMAL STRATIFICATION:

stratified

Depth of thermocline (m):	2.7
Hypolimnion volume (m <sup>3</sup> ):	1675
Anoxic volume (m <sup>3</sup> ):	10050

**CHEMICAL:**Lake: STILLWATER POND, LOWER  
Town: MARLOW

		10 August 1998			
DEPTH (m)			1.5		3.0
pH (units)			6.0		5.8
A.N.C. (Alkalinity)			3.0		6.1
NITRATE NITROGEN			< 0.05		< 0.05
TOTAL KJELDAHL NITROGEN			0.40		0.50
TOTAL PHOSPHORUS			0.020		0.032
CONDUCTIVITY ( $\mu$ mhos/cm)			38.3		33.4
APPARENT COLOR (cpu)			65		120
MAGNESIUM			0.48		
CALCIUM			1.7		
SODIUM			4.5		
POTASSIUM			< 0.40		
CHLORIDE			6		3
SULFATE			3		2
TN : TP			20		16
CALCITE SATURATION INDEX			4.6		

All results in mg/L unless indicated otherwise

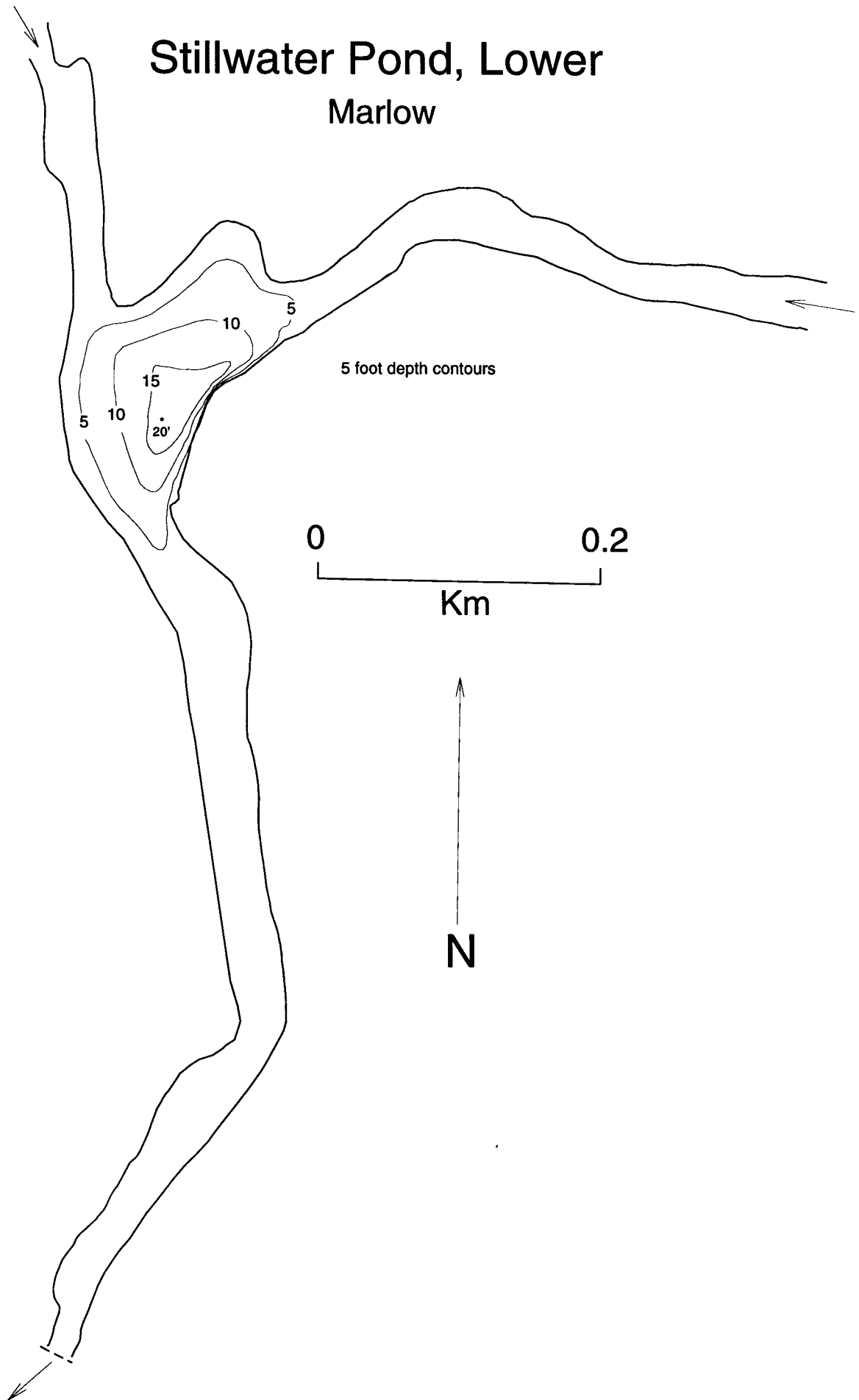
**TROPHIC CLASSIFICATION: 1998**

D.O.	S.D.	PLANT	CHL	TOTAL	CLASS
4	4	5	4	17	Eutro.

**COMMENTS:**

1. This is a small, deep spot in the Ashuelot River where Grassy Brook enters the river; it is not considered a pond in the DES lakes database.
2. No winter samples were collected due to dangerous ice conditions.
3. This is a moderately acidic, tea-colored, eutrophic pond. The pond received approximately equal trophic points from all four trophic indicators: low bottom dissolved oxygen, moderately poor water clarity, abundant rooted plant growth and more than desirable chlorophyll levels.

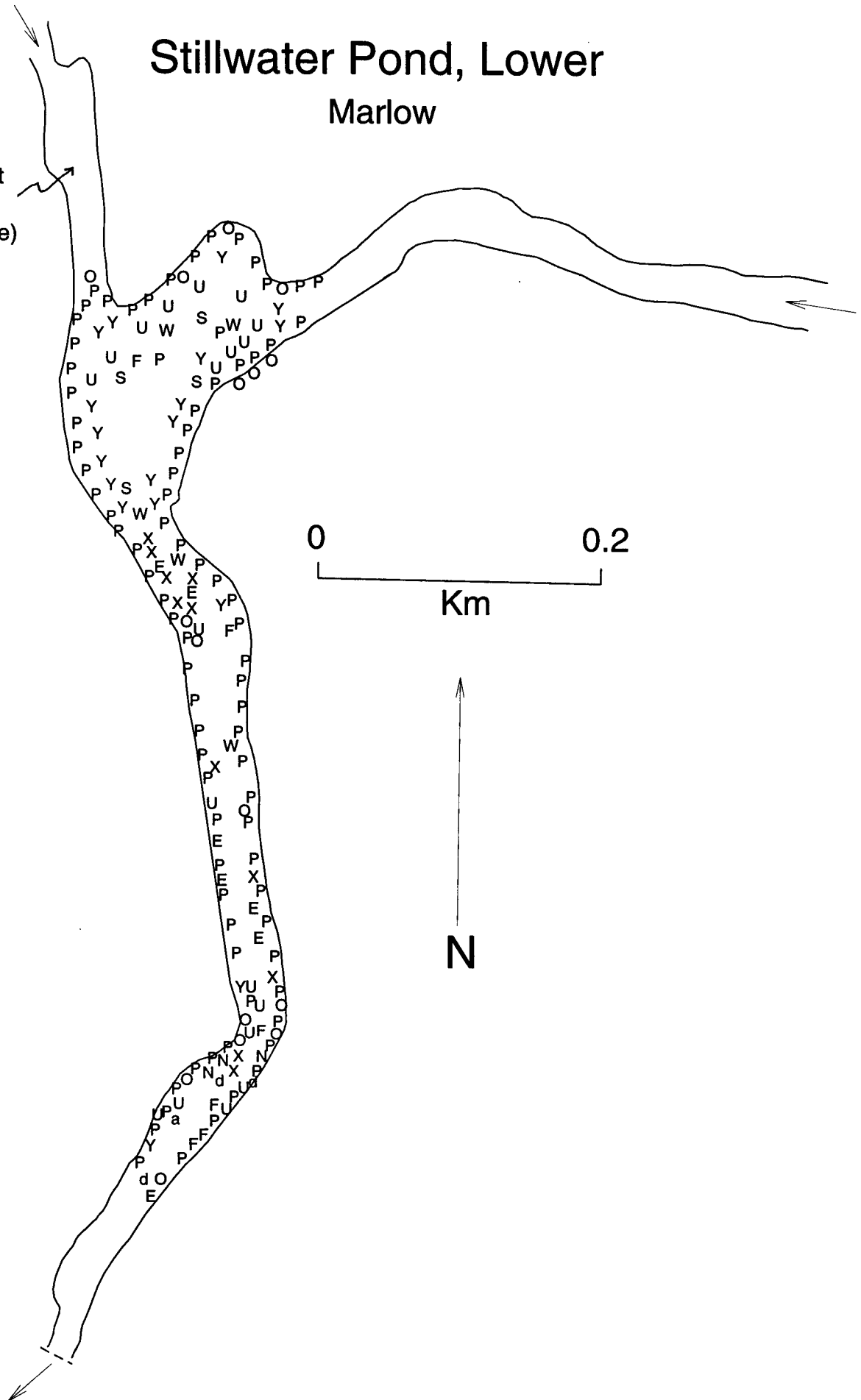
# Stillwater Pond, Lower Marlow





# Stillwater Pond, Lower Marlow

dense plant  
growth  
(non-navigable)



[illegible]